

1. An endovascular support device comprising at least one compressible stent means encapsulated by a balloon of a balloon catheter for implantation in a vessel within the human body.

2 The endovascular support device of Claim 1 wherein the balloon is adhered to the
5 compressible stent means when encapsulated.

3. The endovascular support device of Claim 1 further comprising at least one retainer means for facilitating delivery of the encapsulated stent means for implantation.

4. The endovascular support device of Claim 1 wherein the stent means comprises at least one expandable unitary wire-like member bent to form a plurality of substantially straight, non-overlapping sections connected by axial bends.

5. The endovascular support device of Claim 1 wherein the balloon defines at least three wing means surrounding the balloon catheter for substantially symmetrical expansion of the stent means.

6 The endovascular support device of Claim 4 wherein the balloon defines a number of
15 wing means selected relative to a number of axial bends of the stent means.

7. The endovascular stent means of Claim 4 wherein the stent means comprises at least two connected wire-like members.

8. A method of manufacture of an endovascular support device comprising:
mounting at least one stent means on a balloon of a balloon catheter;
20 placing the mounted stent means within a holding means to prevent expansion of the
mounted stent means;

heating the mounted stent means within the holding means to cause the balloon to expand around the stent means; and

cooling the balloon catheter within the holding means so that the balloon adheres to
25 the stent means.

9. The method of Claim 8 including the steps of pressurizing the balloon catheter during the heating step and during the cooling step.

10. The method of Claim 8 further comprising the step of forming at least one retainer at an end of the mounted stent means.

30 11. The method of Claim 8 including the step of removing the holding means after cooling.

12. A method for treating narrowing of vessels within humans comprising the steps of:

15 15. The balloon of Claim 13 defining at least one retainer portion for facilitating delivery of the stent means.